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DATE MAILED: 09/02/2004

CONFIRMATION NO. ATTORNEY DOCKET NO. FILING DATE FIRST NAMED INVENTOR APPLICATION NO. 4149 GP-303112 10/664,346 09/17/2003 David J. Stroh **EXAMINER** 7590 09/02/2004 **General Motors Corporation** SOLIS, ERICK R Legal Staff PAPER NUMBER **ART UNIT** Mail Code 482-C23-B21 P.O. Box 300 3747 Detroit, MI 48265-3000

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	10/664,346	STROH ET AL.	
	Examiner	Art Unit	
	Erick R Solis	3747	
The MAILING DATE of this communication ap	pears on the cover sheet with the	correspondence ad	ldress
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replection of the period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tiolly within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONI	mely filed ys will be considered timel n the mailing date of this c ED (35 U.S.C. § 133).	ly. ommunication.
Status			
1) Responsive to communication(s) filed on	·		
,—	s action is non-final.		
3) Since this application is in condition for allowa			e merits is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-32 is/are pending in the application	1.		
4a) Of the above claim(s) is/are withdra	wn from consideration.		
5) Claim(s) is/are allowed.			
6) Claim(s) <u>1-8,10-16,18-25,27-30 and 32</u> is/are	rejected.		
7) Claim(s) 9,17,26 and 31 is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9) The specification is objected to by the Examin	er.		
10)⊠ The drawing(s) filed on <u>17 September 2003</u> is	/are: a)⊠ accepted or b)⊡ obje	cted to by the Exar	miner.
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correct			
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form P	10-152.
Priority under 35 U.S.C. § 119			
<ul> <li>12) ☐ Acknowledgment is made of a claim for foreign</li> <li>a) ☐ All b) ☐ Some * c) ☐ None of:</li> <li>1. ☐ Certified copies of the priority document</li> </ul>		ı)-(d) or (f).	
2. Certified copies of the priority documen		tion No	
3. Copies of the certified copies of the price	ority documents have been receiv	ed in this National	Stage
application from the International Burea			
* See the attached detailed Office action for a list	t of the certified copies not receive	ed.	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summary	•	
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08</li> </ul>	Paper No(s)/Mail D  5) Notice of Informal I	Patent Application (PT0	D-152)
Paper No(s)/Mail Date	6) Other:	·	

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 1-8,10,12-16,18,20-25,27,29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Boverie et al (US Patent No. 5349932). This reference teaches controlling the torque output of an engine by calculating a desired air-per cylinder, desired APC (Boverie refers to it as air charge, R<sub>c.)</sub> based on accelerator pedal position. A model (21) uses the R<sub>c</sub> (desired APC) to formulate the throttle opening. A measured APC (R<sub>m.</sub>) is used to adjust the throttle valve and correct any errors between actual and desired APC. See the abstract, col. 2, lines 3-23, col. 3, lines 3-21 and 46-68, col. 4, line 1-25. The air charge of the engine may be measured by a mass flow meter.
- 2. Claims 1-8,10-16,18-25,27-30 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Southern et al. See the abstract, col. 6, lines 23-39, lines 55-68, col. 7, lines 10-32.

# Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11,19,28 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boverie et al. in view of Southern et al. Boverie et al applies as above. Boverie et al do disclose relying on engine speed to help formulate the opening of the throttle valve (see col. 5, lines 20-28). Boverie et al, however, do not appear to rely on ambient temperature or pressure in determining the throttle opening. Southern et al teaches an APC throttle control system wherein the atmospheric temperature and pressure are taken into consideration when deriving the throttle position. It would have been obvious to one of ordinary skill in the art to have taken atmospheric temperature and pressure when deriving the throttle position in Boverie et al's engine since this would have resulted in a more accurate and sophisticated system which could compensate for changes in ambient temperature and pressure.

#### Allowable Subject Matter

5. Claims 9,17,26 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick R Solis whose telephone number is (703) 308-2651. The examiner can normally be reached on Monday-Thursday.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

Erick R Solis

**Primary Examiner** 

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September 1, 2004